

Interim Study 10-03

State Pension systems to a defined
contribution plan for new hires

Requested by:
Senator Patrick Anderson



OKLAHOMA TEACHERS RETIREMENT SYSTEM



Oklahoma Public Employees Retirement System



**OKLAHOMA FIREFIGHTERS
PENSION & RETIREMENT SYSTEM**

Oklahoma Police Pension
& Retirement System



OKLAHOMA LAW ENFORCEMENT RETIREMENT SYSTEM

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■ Presenters:

- Ginger Poplin – OLEERS (covers State Law Enforcement employees)
- Steve Snyder – Police Pension (covers Municipal police officers)
- Bob Jones – Firefighters Pension (covers County and Municipal firefighters)
- Tom Spencer – OPERS (covers State and County government employees)
- James Wilbanks – Teachers (covers State and Local public education employees)

Outline

- Definitions
- History of Oklahoma Public Pensions
- Current Position of Funds
- Plan Design Options
- Experience and Actions of Other States

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■ Definitions:

■ Actuarial Accrued Liability (AAL)

- That portion, as determined by a particular Actuarial Cost Method, of the Actuarial Present Value of Future Plan Benefits which is not provided for by future Normal Costs. **It is equal to the Actuarial Present Value of Future Plan Benefits minus the actuarial present value of future Normal Costs.**

■ Actuarial Value of Assets (AVA)

- The value of the Fund's assets as of a given date, used by the actuary for valuation purposes. This may be the market or fair value of plan assets, but commonly **actuaries use a smoothed value in order to reduce the year-to-year volatility of calculated results**, such as the funded ratio and the ARC.

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■ Definitions:

■ Unfunded Actuarial Accrued Liability (UAAL)

- **The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.** This value may be negative in which case it may be expressed as a negative Unfunded Actuarial Accrued Liability, also called the Funding Surplus.

■ Funding Ratio

- **The ratio of the actuarial value of assets (AVA) to the actuarial accrued liability (AAL).** Plans sometimes calculate a market funded ratio, using the market value of assets (MVA), rather than the AVA, although GASB 25 reporting requires the use of the AVA.

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■ Definitions:

■ Normal Cost

- That portion of the Actuarial Present Value of pension plan benefits and expenses which is allocated to a valuation year by the Actuarial Cost Method. Any payment in respect of an Unfunded Actuarial Accrued Liability is not part of Normal Cost. For pension plan benefits which are provided in part by employee contributions, Normal Cost refers to the total employee contributions and employer Normal Cost unless otherwise specifically stated. Under the entry age normal cost method, the **Normal Cost is intended to be the level costs needed to fund the benefits of a member from hire until ultimate termination, death, disability or retirement.**

■ Actuarially Required Contributions (ARC)

- The employer's periodic required contributions, expressed as a dollar amount or a percentage of covered plan compensation, determined under GASB 25. **The ARC consists of the Employer Normal Cost and the Amortization Payment.**

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■ Definitions:

- Pensions may be best understood by a simple formula:

$$C + I = B + E$$

C = Contributions

I = Investment Returns

B = Benefits

E = Expenses

- C and B are the 2 largest items and are determined by statute.

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■ History of Oklahoma Public Pensions

- State Systems began in the 1940s
- Contributions were insufficient for benefits into the 1980s
- Police and Fire systems were consolidated in 1981
- Social Security impact on certain pension members
- History of COLAs

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■ Current Position of Funds – OLERS

■ Membership

| | |
|-----------------------------|----------|
| ■ Number of Active Members: | 1,301 |
| ■ Number of Retirees: | 1,238 |
| ■ Average Annual Benefit: | \$32,582 |

■ 2.5% Benefit multiplier for members

■ 20 years credited service, or age 62, for retirement eligibility

■ Members vest after 10 years

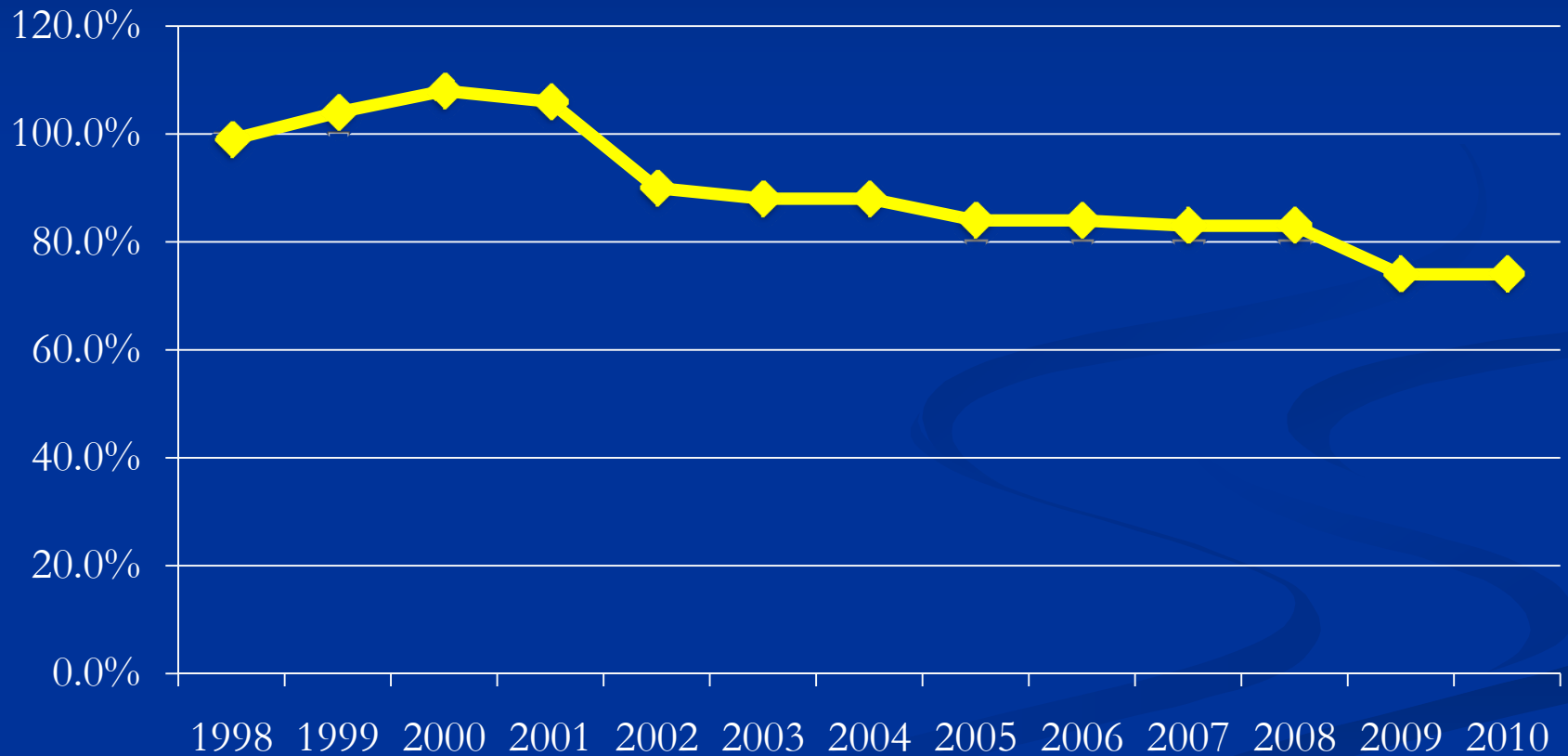
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■ Current Position of Funds – OLEERS

- UAAL = \$238.7 M
- Market Value of Assets (10/31/2010) = \$658.6 M
- Funded Ratio = 74.0%
- Actuarial Required Contribution Rate = 68.3%
- Actual Employer/State Contribution Rate = 30.7%
- Shortfall in Required Contributions = 37.6%

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OLERS Funded Ratio



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■ Current Position of Funds – Police

■ Membership

- Number of Active Members: 4,305
- Number of Retirees: 2,993
- Average Annual Benefit: \$29,093

■ 2.5% Benefit multiplier for members

■ 20 years credited service, or age 62, for retirement eligibility

■ Members vest after 10 years

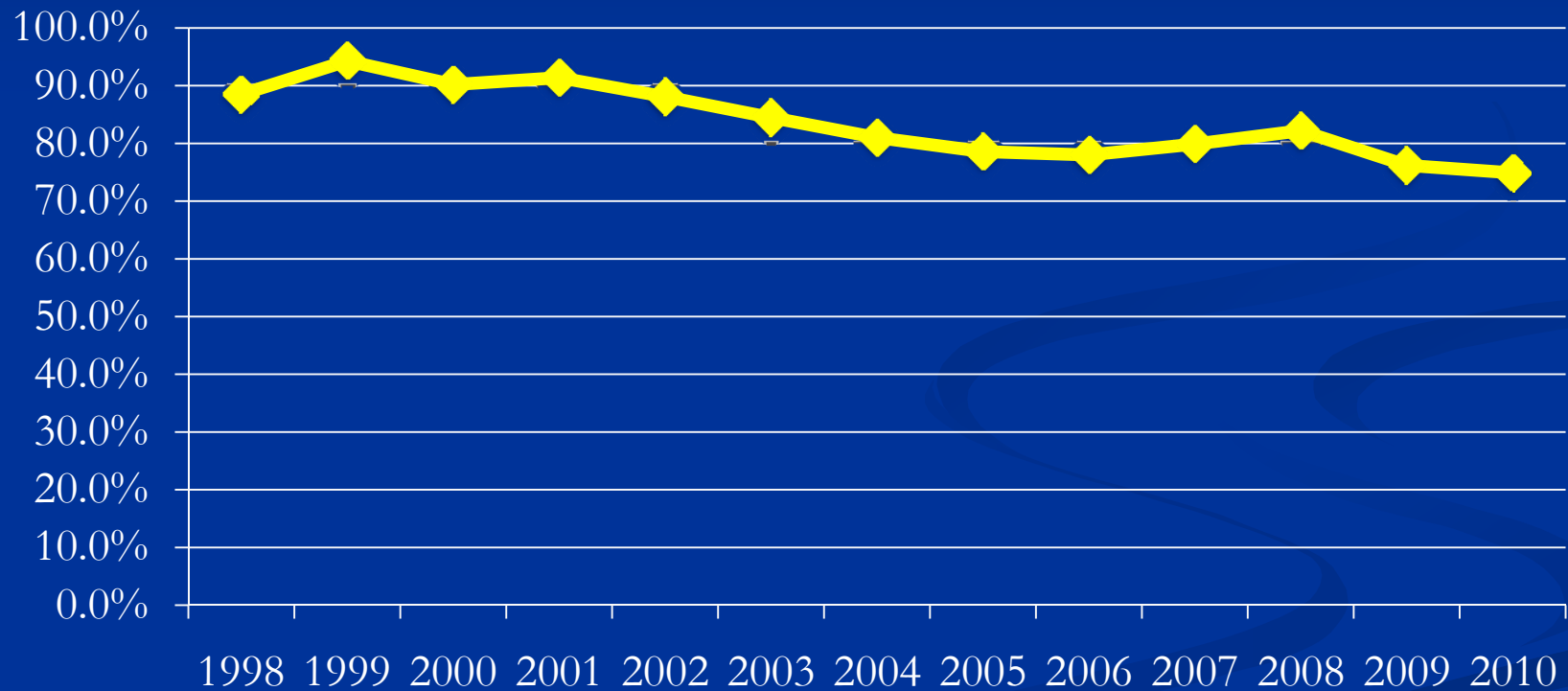
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■ Current Position of Funds – Police

- UAAL = \$587 M
- Market Value of Assets (10/31/2010) = \$1,687 M
- Funded Ratio = 74.9%
- Actuarial Required Contribution Rate = 58.6%
- Actual Employer/State Contribution Rate = 21.8%
- Shortfall in Required Contributions = 36.8%

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Police Funded Ratio



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■ Current Position of Funds – Firefighters

■ Membership

| | |
|---------------------------------------|----------|
| ■ Number of Active Paid Members: | 3,999 |
| ■ Number of Active Volunteer Members: | 8,176 |
| ■ Number of Paid Retirees: | 4,153 |
| ■ Number of Volunteer Retirees: | 5,423 |
| ■ Average Annual Paid Benefit: | \$28,404 |
| ■ Average Annual Volunteer Benefit: | \$1,729 |

■ 2.5% Benefit multiplier for members

■ 20 years credited service for retirement eligibility

■ Members vest after 10 years

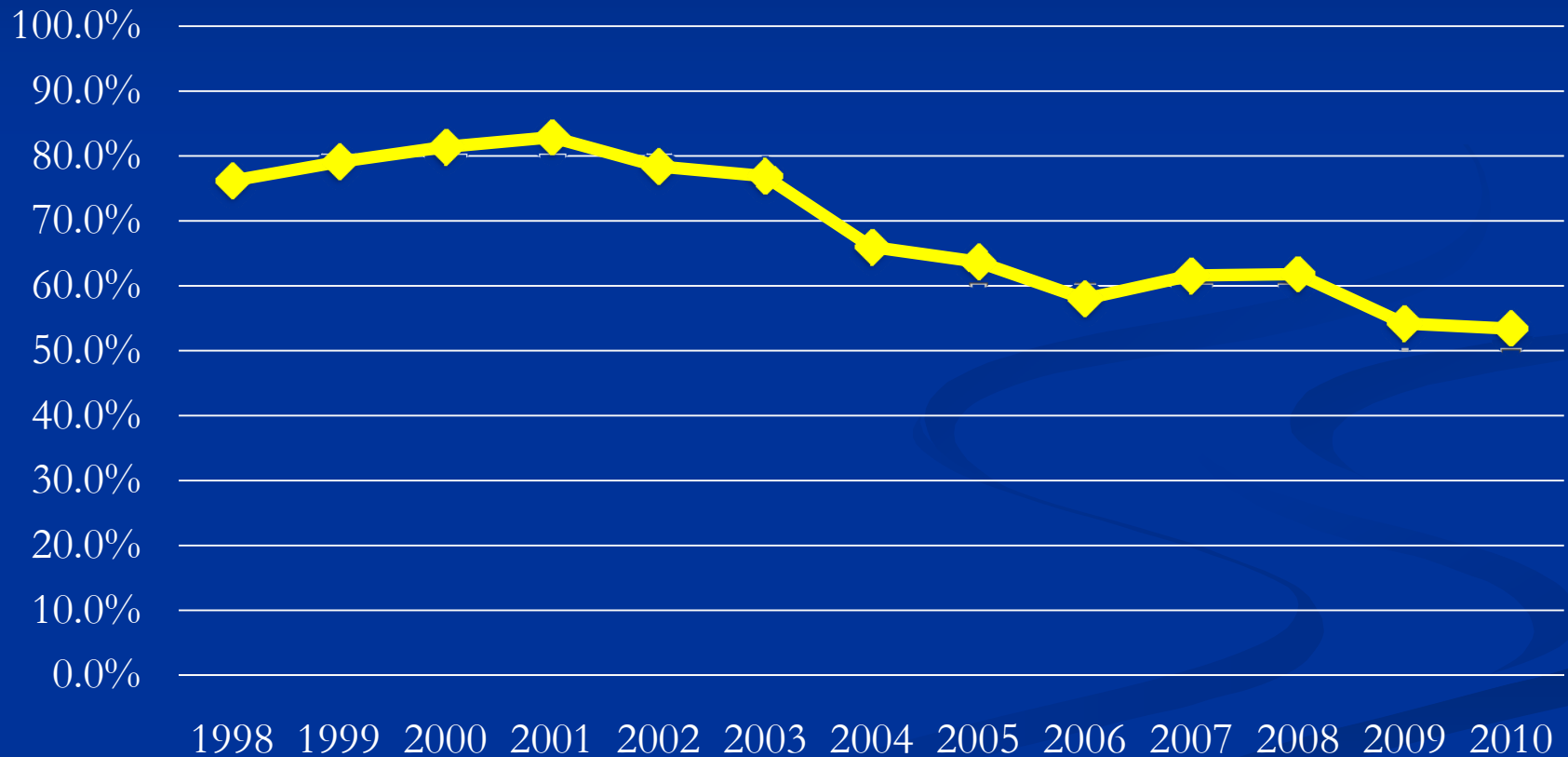
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■ Current Position of Funds – Firefighters

- UAAL = \$1,468 M
- Market Value of Assets (10/31/2010) = \$1,620 M
- Funded Ratio = 53.4%
- Actuarial Required Contributions = 78.4%
- Actual Employer/State Contribution Rate = 34.8%
- Shortfall in Required Contributions = 43.6%

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Firefighters Funded Ratio



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■ Current Position of Funds – OPERS

■ Membership

| | |
|-----------------------------|----------|
| ■ Number of Active Members: | 42,772 |
| ■ Number of Retirees: | 28,237 |
| ■ Average Annual Benefit: | \$14,928 |

■ 2% Benefit multiplier for most members

■ Rule of 80 or 90, or age 62, for retirement eligibility

■ Members vest after 8 years

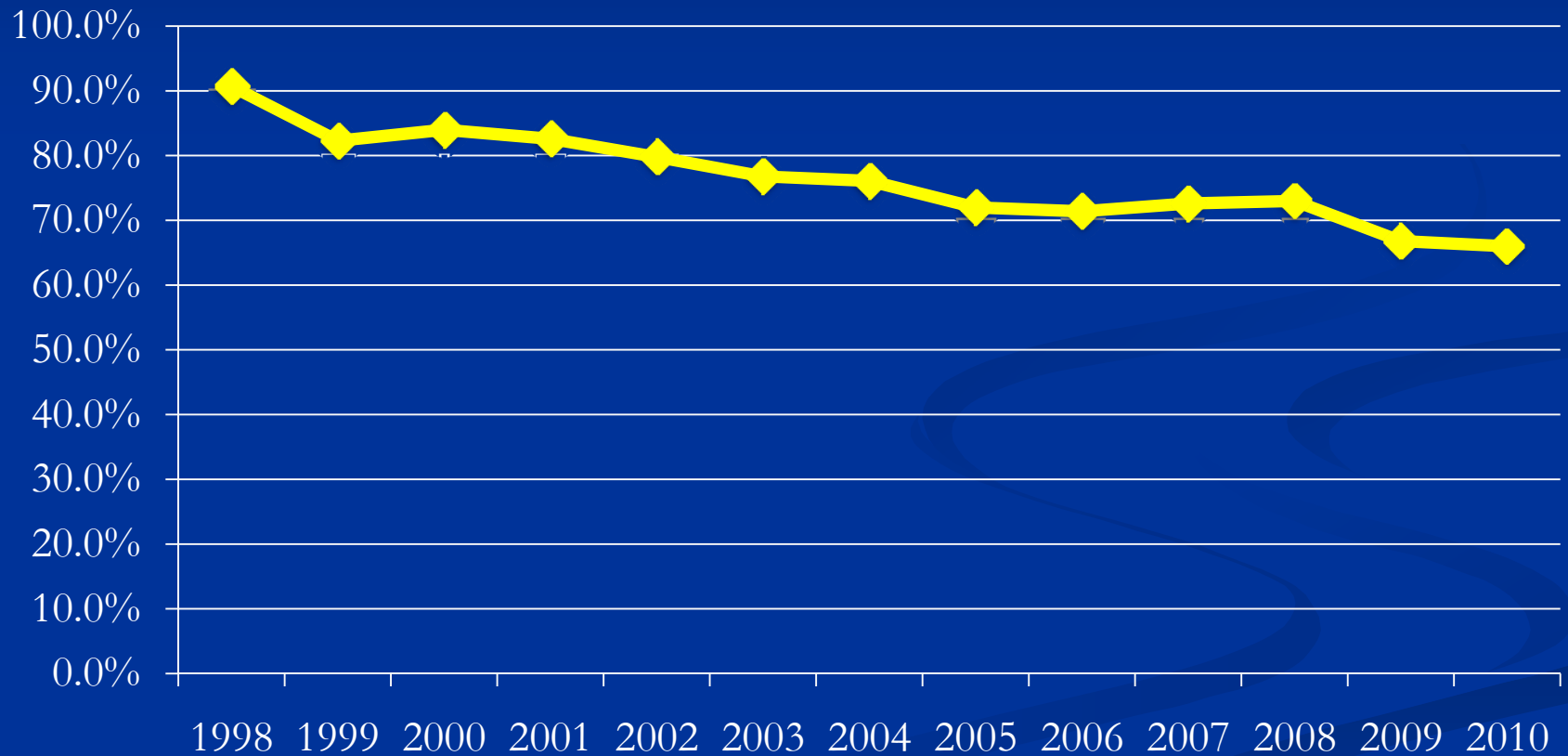
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■ Current Position of Funds – OPERS

- UAAL = \$3,274 M
- Market Value of Assets (10/31/2010) = \$6,39X M
- Funded Ratio = 66.0%
- Actuarial Required Contribution Rate = 23.87%
- Actual Employer Contribution Rate = 15.50%
- Shortfall in Required Contributions = 8.37%

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OPERS Funded Ratio



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■ Current Position of Funds – Teachers

■ Membership

| | |
|-----------------------------|----------|
| ■ Number of Active Members: | 89,896 |
| ■ Number of Retirees: | 48,756 |
| ■ Average Annual Benefit: | \$18,112 |

■ 2% Benefit multiplier for all members

■ Rule of 80 or 90, or age 62, for retirement eligibility

■ Members vest after 5 years

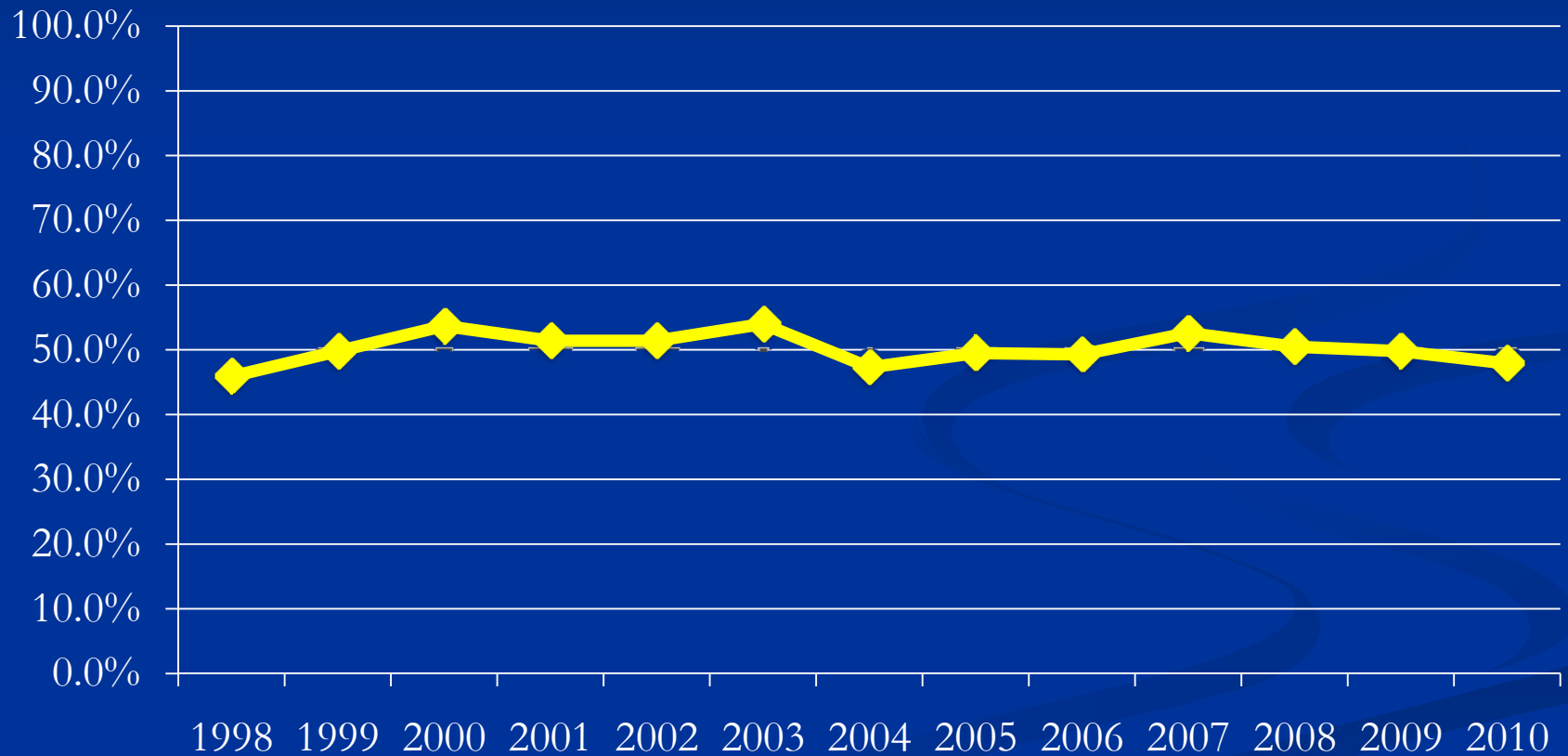
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■ Current Position of Funds – Teachers

- UAAL = \$10,414 M
- Market Value of Assets (10/31/2010) = \$9,269 M
- Funded Ratio = 47.9%
- Actuarial Required Contribution Rate = 20.35%
- Actual Employer/State Contribution Rate = 14.50%
- Shortfall in Required Contributions = 5.85%

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Teachers Funded Ratio



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■ Plan Design Options

■ Defined Benefit (DB)

- Benefit defined by formula:
$$\text{Benefit} = \text{Final Average Salary} \times \text{Benefit Multiplier} \times \text{Years of Service}$$
- OPERS and OTRS use 2% Benefit Multiplier for most clients.
- Public Safety systems use 2.5% Benefit Multiplier (designed as 20 year retirement systems).
- Final Average Salary is highest 3 years salary.
- Contributions into Systems around 16% of salary for OPERS and OTRS, around 23% of salary for public safety plans.

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- Plan Design Options
 - Defined Benefit (DB) – Advantages
 - Lower cost
 - Investment Fees Average 28 bps for State Funds
 - Better investment returns
 - Helps Reduce Required Contributions
 - Incentive for employee longevity
 - Lowers Turnover Cost
 - Certainty of retirement benefits
 - Provides disability and survivor benefits

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■ Plan Design Options

■ Defined Benefit (DB) – Disadvantages

- Volatility of annual contributions
- State assumes all investment risk
- State assumes all longevity risk
- Unfunded liabilities affect State's bond rating
- State is responsible for ensuring sufficient contributions
- Lack of employee account portability
- Full lump sum distribution at retirement generally not available

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■ Plan Design Options

■ Defined Contribution (DC)

- Contributions made into individually owned employee accounts
- Contributions are usually set as a percentage of payroll
 - May be shared between Employer and Employee
- Employee controls investment of account
- Still requires administration and oversight by agency

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■ Plan Design Options

■ Defined Contribution (DC) – Advantages

- Annual contribution certainty
 - Potential for contribution ‘Holiday’ or moratorium
- There is no unfunded liability
 - Does not mean that Current Unfunded Liabilities Disappear
- Employee bears investment risk
- Employee accounts are portable
- Full lump sum distribution at retirement is available
- Employee is responsible for ensuring sufficient contributions

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■ Plan Design Options

■ Defined Contribution (DC) – Disadvantages

- Higher cost to State
- Employee bears risk of working age death or disability
- Employee bears longevity risk
 - Seniors that outlive assets rely on public assistance
- Less incentive for employment longevity
 - May lead to higher turnover and employment costs
- Full lump sum distribution at retirement is available but retirement benefit are uncertain
- Less viable for public safety due to 20 & out careers

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■ Plan Design Options

■ Hybrid Plan – DB/DC

- Contains a DB component and a DC component
- DB component usually has a lower multiplier
- DC component is an employee owned account
- Hypothetical Hybrid:
 - DB with 1% benefit multiplier
 - DC with contributions of 4-9% of Salary

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■ Plan Design Options

■ Hybrid Plan – DB/DC – Advantages

- Investment risk is shared by State and employee
- Longevity risk is shared by State and employee
- Working age death or disability risk may be shared by State and employee
- DB portion provides some retirement benefit certainty
- Employee account is controlled by Employee and fully portable and is available for full lump sum distribution at retirement
- Employee is responsible for ensuring sufficient contributions

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- Plan Design Options
 - Hybrid Plan – DB/DC – Disadvantages
 - Cost of program may be less than DC, but higher than DB
 - Unfunded liability concern remains

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■ Plan Design Options

■ Cash Balance Plan

- Contributions are made into an employee dedicated account
- Account is guaranteed a rate of return (i.e. 6%)
- Plan Administrator manages assets with intent of earning more than the guaranteed rate of return.
- Employee can elect full lump sum distribution at retirement or employee can utilize cash value to purchase annuity to provide steady stream of benefit payments.

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■ Plan Design Options

■ Cash Balance Plan – Advantages

- Annual contribution certainty
- Employee bears longevity risk
- State bears risk of working age death or disability
- Retirement benefit certainty is available to employees in annuity payments
- Full lump sum distribution at retirement is available
- Fully portable employee accounts
- State and employee share responsibility for ensuring sufficient contributions

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- Plan Design Options
 - Cash Balance Plan – Disadvantages
 - Unfunded Liability Concern Remains
 - Employer bears investment risk

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- Experience and Actions of Other States
 - Raising Retirement Age
 - **Illinois** – Raised normal retirement age from 60 to 67
 - **Michigan** – Established normal retirement age at 60 instead of basing retirement on 30 years of service.
 - **Mississippi** – Raised the minimum years for retirement from 25 years to 30.
 - **Missouri** – Raised retirement eligibility from age 62 with 5 years of service, to age 65 with 10 years of service.
 - **New Mexico** – Retained retirement eligibility under “Rule of 80” but went from a minimum of 25 years to 30 years to retire. Can also retire at age 67 with 5 years of service.

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- Experience and Actions of Other States
 - Raising Retirement Age (Continued)
 - **New York Teachers** – Normal retirement age was raised from age 55 to 57. Also retirees had a 2% retirement benefit formula after 20 years of service which has now gone up to 25 years.
 - **Rhode Island** – Retirement age raised to age 62.
 - **Texas ERS** – Raised retirement eligibility from age 60 with 5 years to age 65 with 10 years.
 - **Utah** – Public Safety employees raised from 20 years of service to retire to 25 & out. Other state employees raised the 30 years service requirement for retirement eligibility to 35 years of service.

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- Experience and Actions of Other States
 - Raising Retirement Age (Continued)
 - **Vermont** – Raised retirement eligibility from age 62 with 30 years to age 65. Alternatively members can retire under the “Rule of 90.” This is where age plus years of service must add up to 90 to retire.
 - **Virginia** – Raised from age 50 with 30 years of service for retirement eligibility to the “Rule of 90.” Employees could also retire at age 65 if they had at least 5 years of service and this was raised to the age of normal Social Security retirement with at least 5 years.

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- Experience and Actions of Other States
 - Raising Contribution Rates
 - **Arizona SRS** – Employer & employee contributions are already adjusted annually based on actuarial needs. Employer and employee contributions each went from 9.0% to 9.6% effective July 1, 2010.
 - **Colorado PERA** – Employees pay 8%. Goes to 10.5% for FY 2011. Employers pay 13.85%. Gradually rises to 20.15% by Jan. 2017.
 - **Iowa PERS** – Currently charges a combined rate of 11.95% paid by employee (40%) and the employer (60%). The combined rate increases to 13.45% on 7/1/11 and the Board of Trustees may raise these rates up to 1% per year thereafter if there is an actuarial need.

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- Experience and Actions of Other States
 - Raising Contribution Rates (Continued)
 - **Minnesota PERA** – Employer rates rising from 7.0% to 7.25%. Employee rates rising from 6.00% to 6.25%.
 - **Minnesota Teachers** – Statutory employer & employee contributions rising from 5.5% to 7.5% over 4 years. The Retirement Board has the ability to increase rates thereafter under certain conditions.
 - **Mississippi PERS** – Employee rates going from 7.25% to 9%. Employer rates from 12% to 13.56% effective July 1, 2012.
 - **Vermont** – Employee contributions going from 3.54% to 5%.
 - **Virginia** – New hires will now pay 5%.

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- Experience and Actions of Other States
 - Benefit Formula – Final Average Salary
 - **Arizona SRS** – Going from an average of the highest 3 years' salaries to 5 years.
 - **Illinois** – Going from the final 4 year average salary to the highest 8 of the last 10 years on the payroll.
 - **Iowa** – From high 3 to high 5 years.
 - **New Jersey State Employees** – From high 3 to high 5.
 - **New Jersey Public Safety** – From highest single year to high 3 years.
 - **Rhode Island** – From highest 3 years to 5 years.
 - **Virginia** – From highest 3 years to 5 years.

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- Experience and Actions of Other States
 - Vesting Period
 - Iowa – From 4 to 7 years
 - Minnesota PERA – From 3 to 5 years
 - Minnesota SRS – From 3 to 5 years
 - Missouri SERS – From 5 to 10 years
 - N.Y. State & Local – From 5 to 10 years
 - N.Y. State Teachers – From 5 to 10 years

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- Experience and Actions of Other States
 - COLA Reduction
 - **Colorado PERA** – Reduced auto-COLA to lesser of CPI or 2%.
 - **Illinois (all state plans)** – Went from 3% auto to lesser of 3% or $\frac{1}{2}$ of CPI.
 - **Minnesota PERA** – Reduced from 2.5% auto to 1.0% until funding ratio reaches 90%.
 - **Minnesota SERS** – Reduced from 2.5% auto to 2% until funding ratio reaches 90%.

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- Experience and Actions of Other States
 - COLA Reduction (Continued)
 - **Minnesota Teachers** – 2 year suspension of COLAs. Then reduce 2.5% to 2% until funding ratio reaches 90%.
 - **South Dakota** – Removes COLAs in 1st year of retirement. Lowers COLAs prospectively based on funding ratio. From a low of 2.1% if less than 80% funded, to 3.1% if 100% or more.

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- Experience and Actions of Other States
 - Conversion from DB to Hybrid Plan
 - **Georgia** – New employees after Jan. 1, 2009 will have a 1% DB benefit. DC plan requires employee to pay 1% of salary matched by employer. Employee can defer more which will be 50% matched up to 3% of employees salary.
 - **Michigan** – New education employees after July 1, 2010 will have a 1.5% benefit multiplier. Employees must pay 2% into a DC account and the employer matches it at 1%.
 - **Utah** – New employees hired on July 1, 2011 or after have the option of a hybrid plan or just a DC Plan. The hybrid plan has a 1.5% DB multiplier. The employer pays 10% toward the employees' retirement benefit. All funds go to the DB plan except that not required for actuarial purposes goes to the individual DC account. Employee must make up the difference if DB plan requires more. The employee may contribute additional amounts to the DC account.

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■ Experience and Actions of Other States

■ DC Only Option

The following states have a DC plan as the sole option for all employees or groups as identified below.

- **Alaska** – effective July 1, 2006
- **District Of Columbia** – effective 1987
- **Michigan** – State employees since March 31, 1997

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